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REMARKS

This paper is responsive to the Non-Final Office Action dated November 30, 2004. Claims 1-25 were examined. Claims 1 – 25 were rejected. Applicant makes non-narrowing amendments to claims 4, 14, 15, and 21 to clarify “temperature difference,” and not to overcome any of the art of record. Claims 2 – 3 and 10 – 13 have been cancelled. New claims 26 – 34 have been added.

Rejections Under 35 U.S.C. §§ 102 & 103

Claims 1-4, 7, 10, and 12 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,502,838 issued to Kikinis (hereinafter “Kikinis”). Claims 5-6, 8-9, 11, 13-18, and 21-22 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kikinis. Applicant respectfully traverses all of these rejections. The rejections cannot be supported properly because 1) Kikinis discloses subject matter that is converse to Applicant’s claimed subject matter, 2) Kikinis does not disclose or suggest determining user activity and the inherency rejection of claim 1 is inappropriate, and 4) the obviousness rejection of claim 21 is inappropriate.

1) Kikinis’ disclosure is converse to Applicant’s claimed subject matter

Kikinis does not disclose or suggest adjusting processor performance in accordance with detected user activity. Kikinis attempts to control temperature of a processor and not to satisfy user activity with increased performance (or conserve power by decreasing performance when user activity is either low or inactive). Kikinis discloses controlling temperature buildup by lowering clock rate or lowering operating voltage of a processor if a measured temperature exceeds a temperature threshold, whereas Applicant claims increasing performance when measured temperature exceeds a desired operating temperature, and decreasing performance if the measured temperature falls below the desired operating temperature.

It can easily be seen that Kikinis does not disclose or suggest any of Applicant’s claims, especially independent claims 14 and 15 and dependent claims 5, 6, 8, 9, 16, 17, and 18. If the temperature difference is positive (i.e., the measured temperature exceeds the desired operating temperature), then performance is increased to satisfy high user activity. Conversely, if the

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temperature difference is negative, (i.e., the measured temperature is less than the desired operating temperature), then performance is decreased, thus conserving power when user activity is low.

2) Kikinis does not disclose or suggest determining user activity and the assertion of inherency is inappropriate

Kikinis does not disclose or suggest determining user activity, and the Office Action does not provide any support for rejecting the corresponding limitation in claim 1. The Office Action states that

[t]he temperature reading of the processor is directly related to processor activity because the more active a processor is, the more power the processor consumes and the temperature output of the processor is directly related to the power consumed by the processor. Therefore, a temperature reading that has risen to exceed the desired (threshold) temperature clearly indicates increased user activity and a temperature reading that has dropped below the desired temperature clearly indicates decreased user activity. (page 4 of Office Action)

The Office states nothing more than a relationship between user activity, processor activity, processor power, and temperature. Kikinis does not disclose or suggest determining user activity based on a temperature difference as claimed in claims 1 and new claim 26. Applicant respectfully submits that the Office has not provided any support or reason for rejecting claim 1 based on Kikinis.

The Office improperly asserts that such determining is inherent in Kikinis, even though the Office cannot uncover any motivation or suggestion in Kikinis for determining user activity. The Office states that "determining a user activity indication based on the temperature difference is inherently performed when comparing the temperature reading to the threshold temperature" (page 3 of the Office Action). Applicant notes that In re Robertson, 49 U.S.P.Q.2d 1949, 1950-51 (Fed. Cir. 1999) makes clear that anything that the Examiner asserts is inherent, must necessarily be present in the reference:

To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill."

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Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268, 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991). "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." Id. at 1269, 20 U.S.P.Q.2d at 1749 (quoting In re Oelrich, 666 F.2d 578, 581, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981)).

There is neither an explicit disclosure or suggestion nor an inherent disclosure or suggestion for determining user activity based on a temperature difference in Kikinis.

3) Inappropriate Obviousness Rejection of claim 21

The Office rejects claim 21 under 35 U.S.C. §103 as being obvious in view of Kikinis. With regard to claim 21, the Office asserts that it would have been obvious to one of ordinary skill in the art to achieve Applicant's claimed invention in view of Kikinis. To reject this claim, the Office states that

it is well known in the power control and timing arts to allow a user to disable automatic systems or to set automatic system parameters so that the automatic system features do not operate under normal operating conditions so that they will not interfere with tasks such as downloading, copying, audio, and video tasks. It would have been obvious to one having ordinary skill in the art at the time the invention was made to allowing a user to select between a manual clock speed mode and an automatic clock speed mode, as suggested by Kikinis, in order to increase the flexibility of the system and allow the user to disable the automatic features if they interfere with the performance of tasks such as downloading, copying, audio, and video tasks.

Claim 21 recites the following:

an operating system that allows a user to select between a manual clock speed mode of operation and an automatic temperature-based mode of operation..

...when the computing system is in the automatic temperature-based mode of operation, the clock signal applied to the clock input has a frequency that is adjusted based on the temperature difference of the temperature reading from the desired operating temperature

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Despite the assumptions about ordinary skill at the time of the invention, there is no evidentiary support in the record for the assumptions made by the Office. One of the basic criteria for an obviousness rejection is that the prior art reference must teach or suggest all of the claim limitations (MPEP 2143). "Although a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so'" (MPEP 2143.01, *quoting In re Mills*, 916 F.2d 680 (Fed. Cir. 1990)). Since Kikinis lacks such suggestions or motivation to achieve Applicant's claimed invention, the Office assumes, without any evidentiary support in the record, that it would have been obvious to one of ordinary skill in the art to modify Kikinis as stated in the above quotation from the Office Action. Indeed, "[i]t is never appropriate to rely solely on 'common knowledge' in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based" (MPEP 2144.03, *citing In re Zurko*, 258 F.3d 1379 (Fed. Cir. 2001)). "[A]n assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support" (MPEP 2144.03, *citing Id.*). Hence, the obviousness rejection of claim 21 is based on nothing except the Office's assumption about common knowledge at the time of the invention, and is therefore inappropriate.

For at least the reasons above, neither Kikinis nor Atkinson disclose or suggest any of Applicant's claims. Applicant respectfully submits that all of Applicant's claims are allowable.

Conclusion

In summary, claims 1, 4 - 9, 14 - 34 are in the case. All claims are believed to be allowable over the art of record, and a Notice of Allowance to that effect is respectfully solicited. Nonetheless, if any issues remain that could be more efficiently handled by telephone, the Examiner is requested to call the undersigned at the number listed below.

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28-Feb-2005
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Respectfully submitted,



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